Serial No.: 08/403,803 Filed: March 17, 1995

Page: 3

stated that applicant's arguments filed November 16, 1998 have been fully considered but they are not deemed to be persuasive because Applicant merely asserts that it is a routine experiment to design an appropriate probe according to the Sambrook textbook chapter provided by applicant.

The Examiner stated that applicant has not provided any evidence or sound scientific reasoning to overcome the grounds of the rejection due to unpredictability and undue experimentation set forth in Paper No. 14, filed May 12, 1998, which deal with the PSM antigen probe in particular and specific detail. The Examiner stated that in addition, it is noted that Applicant is not limiting the claims to a probe to a known nucleotide sequence, but to a known amino acid sequence which can be encoded by a great variety of nucleotide sequences.

In response, applicants respectfully traverse the Examiner's position. Applicants contend that undue experimentation would not necessary to practice the claimed invention. have Nevertheless, without conceding the correctness of the Examiner's position but to expedite the prosecution of the application, applicants have hereinabove amended the claims such that the probe has a sequence which is complementary to the target sequence. Applicants contend that it is routine for one skilled in the art to design probes which are complementary to a particular nucleic acid sequence. Applicants contend that one skilled in the art would not need to perform undue experimentation to practice to claimed invention. Applicants contend that these amendments and remarks obviate the Examiner's position. Accordingly, applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Serial No.: 08/403,803 Filed: March 17, 1995

Page: 4

## Rejection Under U.S.C. §112, Second Paragraph

The Examiner rejected claims 90-99 under 35 U.S.C. §112, second paragraph, for reasons of record and the following. The Examiner stated that applicant's arguments filed November 16, 1998 have been fully considered but they are not deemed to be persuasive because applicant merely asserts that one skilled in the art would know to use the hybridization conditions set forth in a laboratory manual such as the Sambrook textbook chapter provided by applicant. The Examiner stated that applicant has not provided any evidence or sound scientific reasoning to overcome the grounds of the rejection because "specifically hybridizing" conditions, as set forth in laboratory manuals, vary with the length and nucleotide composition of a particular nucleotide sequence. The Examiner stated that the instant claims do not set forth a fixed length or nucleotide composition of the probe/primer/molecule.

In response, applicants respectfully traverse the Examiner's position. Nevertheless, without conceding the correctness of the Examiner's position but to expedite the prosecution of the subject application, applicants have hereinabove amended the claims such that the claims are drawn to an nucleic acid probe which is complementary to the target sequence. Accordingly, the probe must not only hybridize but also be complementary to the sequence. Applicants contend that one skilled in the art would know how to design a probe which is complementary to a particular nucleic acid sequence and be able to hybridize it to the target. Applicants contend that these amendments and remarks obviate the above rejection and respectfully request that the Examiner reconsider and withdraw the rejection.

## Rejection Under 35 U.S.C. §102(b)

The Examiner rejected claims 90,92,93,95 under 35 U.S.C. §102(b) as

Serial No.: 08/403,803 Filed: March 17, 1995

Page: 5

being anticipated by Solin for reasons of record and the following. The Examiner stated that applicant's arguments filed November 16, 1998 have been fully considered but they are not deemed to be persuasive because applicant argues limitations that are not in the claims. The Examiner stated that the composition of Solin contains isolated nucleic acid that could hybridize under some specific conditions meeting the limitations of the claims. The Examiner stated that the instant claims use open language so they are limited to a single isolated nucleic acid molecule sequence. The Examiner stated that limitations on hybridization conditions are also not recited in the instant claims, nor is degree of purity or isolation.

In response, applicants respectfully traverse the Examiner's above rejection. Applicants maintain that Solin does not anticipate applicants' claimed invention. Applicants contend that Solin does not disclose applicants claimed invention, namely an nucleic acid probe comprising a nucleic acid which is at least 15 nucleotides in length which nucleotides have a sequence which is complementary or has the nucleic acid having a sequence set forth in SEQ ID No. 1. support that Solin does not disclose applicants claimed invention, applicants respectfully point the Examiner's attention to Sharief, F.S. (1989) Biochem. Biophys, Res. Com. 160:79-86, which is attached hereto as Exhibit A. Figure 2 shows the cDNA and amino acid sequences of PAP. Applicants point out that the cDNA sequence and the amino acid sequence of PAP do not correspond, nor are they homologous to the isolated nucleic acid molecule which encodes PSMA, nor to a probe which would hybridize to PSMA. Since Solin does not disclose the PSMA sequence, applicants contend that the Solin does not anticipate applicants' claimed invention. Accordingly, Solin should be removed as a reference. Applicants contend that these remarks and amendments obviate the above

Serial No.: 08/403,803 Filed: March 17, 1995

Page: 6

rejection and respectfully request that the Examiner reconsider and withdraw the rejection.

## Rejection Under 35 U.S.C. §102(b)

The Examiner rejected claims 90-95 under 35 U.S.C. §102(b) as being anticipated by Faber for reasons of record and the following. The Examiner stated that applicant's arguments filed November 16, 1998 have been fully considered but they are not deemed to be persuasive because applicant argues limitations that are not in the claims. The Examiner stated that the composition of Faber contains isolated nucleic acid that could hybridize under some specific conditions meeting the limitations of the claims. The Examiner stated that the instant claims use open language so they are not limited to a single isolated nucleic acid molecule sequence. The Examiner stated that limitations on hybridization conditions are also not recited in the instant claims, nor is degree of purity or isolation.

In response, applicants respectfully traverse the Examiner's above contend that Faber does not Applicants rejection. an nucleic acid applicants claimed invention, namely comprising a nucleic acid which is at least 15 nucleotides in sequence which has length which nucleotides have a complementary to a nucleic acid having a sequence set forth in SEQ ID No. 1. Applicants point out that Faber et al discloses human androgen receptor cDNA. As support that Faber does not disclose applicants claimed invention, applicants respectfully point the Examiner's attention to Chang et al (1988) Proc. Natl. Acad. Sci. U.S.A. 85:7211-7215, a copy of which is attached hereto as **Exhibit** B. Figure 2 discloses the cDNA and amino acid sequence of the androgen receptor. Applicants respectfully point out that these sequences do not correspond, nor are they homologous to the

Serial No.: 08/403,803 Filed: March 17, 1995

Page: 7

isolated nucleic acid molecule which encodes PSMA, nor to a probe which would hybridize to PSMA. Since Faber does not disclose the PSMA sequence, applicants contend that the Faber does not anticipate applicants' claimed invention. Accordingly, Faber should be removed as a reference. Applicants contend that these remarks and amendments obviate the above rejection and respectfully request that the Examiner reconsider and withdraw the rejection.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone at the number provided below.

## Summary

For the reasons set forth hereinabove, applicants respectfully request that the Examiner reconsider and withdraw the various grounds for objection and rejection and earnestly solicit allowance of the claims now pending in the subject application.

Applicants:

Ron S. Israeli et al.

Serial No.:

08/403,803

Filed

March 17, 1995

Page 8

No fee other than the enclosed \$435.00 fee for a three-month extension of time is deemed necessary in connection with the filing of this Amendment. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

. No. 28,678

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